(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 0 680 734 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
24.01.1996 Bulletin 1996/04

(43) Date of publication A2:
08.11.1995 Bulletin 1995/45

(21) Application number: **95112010.4**

(22) Date of filing: **15.07.1991**

(51) Int. Cl.^{6}: **A61F 2/06**, A61M 25/10

(84) Designated Contracting States:
AT BE CH DE DK ES FR GB GR IT LI LU NL SE

(30) Priority: **13.07.1990 US 553530**

(62) Application number of the earlier application in accordance with Art. 76 EPC: **91306388.9**

(71) Applicant: **ENDOVASCULAR TECHNOLOGIES, INC.**
Menlo Park, California 94025-1436 (US)

(72) Inventors:
- **Lazarus, Harrison M.**
  Salt Like City, Utah 84103 (US)
- **Williams, Ronald G.**
  Menlo Park, California 94025 (US)
- **Sterman, Wesley D.**
  San Francisco, California 94109 (US)
- **Piplani, Alex A.**
  Mountain View, California 94040 (US)

(74) Representative: **Mayes, Stuart David et al**
London, EC4A 1PQ (GB)

(54) Endovascular grafting apparatus, system and method and devices for use therewith

(57) Endovascular grafting system having a capsule catheter (12) comprising a flexible elongate tubular member (16) having proximal and distal extremities and a capsule (36) mounted on the distal extremity of the tubular member (16). The capsule (36) is generally cylindrical in shape and is formed of a helical wrap of a metal ribbon (39). The wraps are bonded into a unitary capsule (36) permitting bending of said unitary capsule (36). A graft (121) is disposed within the capsule (36). The graft (121) is comprised of a tubular member (122) having proximal (123) and distal (124) ends. Hooks (151) are secured to the proximal (123) and distal (124) ends of the tubular member (122) and face in a direction outwardly towards the inner wall (37) of the capsule (36). A push rod (96,106) is disposed within the capsule catheter (12) and engages the graft (121) whereby upon relative movement between the push rod (96,106) and the capsule catheter (12), the graft (121) can be forced out of the capsule (36).

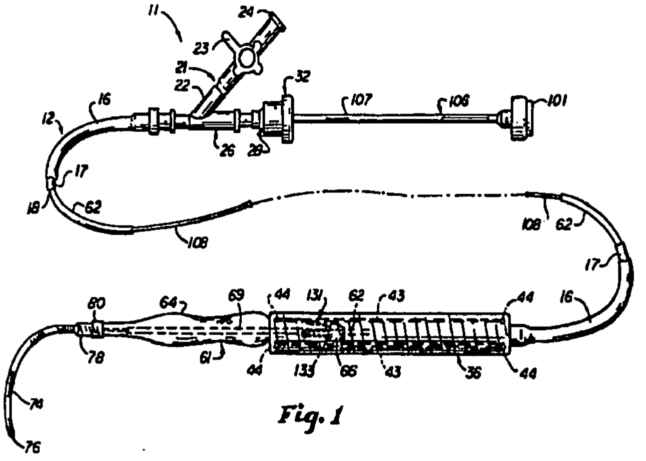

Fig. 1

Printed by Rank Xerox (UK) Business Services
2.9.7/3.4

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 95 11 2010

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
D,Y A	WO-A-89 08433 (LAZARUS) * page 8, line 4 - page 12, line 19; figures 2-4,9-11 *	1,4-6 10	A61F2/06 A61M25/10
P,Y	EP-A-0 423 916 (COOK INCORPORATED) * abstract; figures 3,5-10C *	1,4-6	
A	US-A-4 830 003 (WOLFF) * abstract; claim 8; figure 4 *	3,8	
A	US-A-4 562 596 (KORNBERG) * column 3, line 60 - column 4, line 5; figures 1-3 *	6,7	
D,A	US-A-4 787 899 (LAZARUS)		
			TECHNICAL FIELDS SEARCHED (Int.Cl.5)
			A61F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	23 November 1995	Klein, C

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document